

On the Overvoltage of Hydrogen in the Fused
Electrolyte, by S. Karpachev, S. Rempel, E. Yordan,
14 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XIII, No 8, 1939,
10.7.1951.

26, 708

Sci Trans Center
RT-2403

Scientific - Chemistry

Sep 55 CTS/DEX

Overvoltage on Mercury in Presence of Surface-Active
Electrolytes, by Z. Iofa, B. Kabanov, E. Kuchinskiy,
P. Chistyakov, 19 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XIII, 1939, pp

~~1105~~ 1105-1116.

AEC Tr 1859

Scientific - Physics
CTS/DEX

14,386

Electroosmotic Investigation of the Surface Layers
on Glass, by V. S. Molchanov, 14 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XIII, No 8, 1939,
pp 1124-1130.

Sci Tr Center RT-1208

Scientific - Chemistry

Jul 54 CTS

16,050

(NY-4830)

Spectroscopic Investigation of the Carbon Disulfide
Flame. I., by V. Kondrat'yev, 29 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XIII, No 9,
1939, pp 1260-1270.

JPRS 7500

Sci - Chem

Feb 61.

139,372

Electrical Conductivity and Specific Gravity
of the System of Fused Salts $\text{Na}_4\text{P}_2\text{O}_7\text{-NaCl}$, by
S. I. Sklyarenko, I. E. Krauze, 22 pp.

RUSSIAN, no per, Zhur Fiz Khim, Vol XIII,
No 9, 1939, pp 1315-1321.

OTS-64-14-27
Sci Tr Center
RT-2182

Scientific - Chemistry
CTS 70/Jul 55

25,218

Solubility of Solid Acetylene and Carbon
Dioxide in Liquid Oxygen, Nitrogen and Mixtures
of Oxygen-Nitrogen, by I. P. Iskhin, P. Z.
Burko, 4 pp.

per,
RUSSIAN, Zhur Fiz Khim, Vol XIII, 1939,
pp 1337-1339.

Sci Mus Lib 55/2563

Sci - Chemistry

30,112

The Diffusion Theory of Photographic Development, by D. A. Frank-Kamenetskii.
RUSSIAN, per, Zh. Fiz. Khim., Vol 13, No 10,
1939, pp 1403-1410.
NLL 5828.4F (11853)

Sci - Rhema
Met & Equip
Sept. 67

340,376

Cathode Polarization in the Deposition of
Magnesium From Fused Carnallite, by B. Markov,
I. Shcherbakov, V. Kalitova, 27 pp.

RUSSIAN, no per, Zhur Fiz Khim, Vol XIII,
No 10, 1939, pp 1472-1482.

OTS TT-64-14148
Sci Tr Center
RT-2183

Scientific - Chemistry
OTS 70/Jul 55

25,226

Volkenstein, M. V. and Shorygin, P. P.
ANALYSIS OF GASOLINE BY THE RAMAN EFFECT,
II. [1963] [18]p. 12 refs.
Order from OTS or SLA \$1.60

63-16025

Trans. of [Zhurnal Fizicheskoi Khimii] (USSR) 1939,
v. 13, p. 1512-1522.

DESCRIPTORS: *Gasoline, Chemical analysis, *Raman
spectroscopy.

(Materials--Fuels, TT, v. 10, no. 7)

63-16025

I. Volkenstein, M. V.
II. Shorygin, P. P.

Office of Technical Services

Current Yield of Magnesium as Function of
Magnesium Chloride Content of Melt in Electrolysis
of Molten Carnallite, by B. Markov, V. Kalitova,
8 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XIII, No 11,
1939, pp 1559-1562.

OTS TT-64-14146

Sci. Tr. Center RT-2184

SLA R-2936

Scientific - Chemistry

Apr 55 OTS

28, 8/10

Berestneva, Z. Ya. and Kargin, V. A.
ADSORPTION OF ELECTROLYTES ON HIGHLY
PURIFIED ALUMINA AND FERRIC OXIDE GELS.
[1961] 7p. 5 refs.

Order from OTS or SLA \$1.10

61-18056

Trans. of Zhurnal Fizicheskoi Khimii (USSR) 1939,
v. 13, p. 1625-1634.

DESCRIPTORS: *Electrolytes, Adsorption, Determina-
tion, *Gels, Iron compounds, Oxides, Aluminum
compounds.

(Unannounced)

61-18056

I : Berestneva, Z. Ya.
II : Kargin, V. A.

184041

Office of Technical Services

MTWL-130, 4 1962 (4117) (P...)

Fastovskii, V. G. and Gurvich, I. G.
HET ONDERZOEK VAN HET EVENWICHT VLOEI-
STOF - DAMP VAN HET BINAIRE SYSTEEM
ZUURSTOF - KRYPTON (The Equilibrium Liquid -
vapour in the Binary System Oxygen - Krypton) tr. by
A. Bosch-Sukacz and G. J. M. Fritschy. 17p. 16 refs.
MTWL: 130. (text in Dutch).
Order from OTS or EIC \$1.35

61-17735

Trans. of Zhurnal Fizicheskoi Khimii (USSR) 1939,
v. 13, p. 1680-1689.

DESCRIPTORS: *Krypton, *Oxygen, Phase studies,
Liquids, Vapours.

61-17735

I. Fastovskii, V. G.
II. Gurvich, I. G.
III. MTWL-130
IV. Stichting Moelijk
Toegankelijke Wetenschap-
pelijke Literatuur

Office of Technical Services

62-24460

Abdulaev, Ya. A.

PHASE RELATIONS IN MIXTURES OF CARBON
DIOXIDE WITH HYDROGEN, NITROGEN AND CAR-
BON MONOXIDE, tr. by Bertha P. Klenova, 14 Dec 61,
3p. 3 refs. TVA-3967.

Trans. of [Zhurnal Fizicheskoi Khimii] (USSR) 1939,
v. 13, p. 986-988.

DESCRIPTORS: Carbon dioxide, Hydrogen, Nitrogen,
Carbon compounds, Monoxides, Mixtures, Phase
studies.

I. Abdulaev, Ya. A.
II. TVA-3967
III. Tennessee Valley Authority,
Wilson Dam, Ala.

{Unannounced}

Office of Technical Services

Abdulaev, Ya. A.
DE PHASEN-VERHOUDINGEN IN MENGSELS VAN
KOOLZUUR MET WATERSTOF, STIKSTOF EN KOOL-
STOFXYDE (Phase Relations in Mixtures of Carbon
Dioxide with Hydrogen, Nitrogen, and Carbon Monoxide)
tr. by A. Bosch-Sulacz and G. J. M. Fritschy. 6p.
3 refs. MTWL: 1321 (text in Dutch).
Order from OTS or ETC \$1.55

61-17716

Trans. of Zhurnal Fizicheskoi Khimii (USSR) 1939,
v. 13, p. 986-988.

DESCRIPTORS: *Phase studies, *Carbon dioxide,
*Hydrogen, *Nitrogen, Carbon compounds, Monoxides

61-17716

- I. Abdulaev, Ya. A.
- II. MTWL-132
- III. Stichting Moeilijk
Toegankelijke Wetenschap-
pelijke Literatuur

Office of Technical Services

On the Overvoltage of Hydrogen in the Fused
Electrolyte, by S. Karpachev, S. Rempel, E. Yordan,
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RUSSIAN, per, Zhur Fiz Khim, Vol XIII, No 8, 1939,
1087-1091.

26, 708

Sol Trans Center
RT-2403

Scientific - Chemistry

Sep 55 CTS/DEX

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F. Chistyakov, 19 pp.

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AEC Tr 1859

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JPRS 7500

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RUSSIAN, no per, Zhur Fiz Khim, Vol XIII,
No 9, 1939, pp 1315-1321.

STS-64-1-27

Sci Tr Center
RT-2182

Scientific - Chemistry
CTS 70/Jul 55

25,218

Solubility of Solid Acetylene and Carbon
Dioxide in Liquid Oxygen, Nitrogen and Mixtures
of Oxygen-Nitrogen, by I. P. Iskhin, P. Z.
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The Diffusion Theory of Photographic Development, by D. A. Frank-Kamenetskii.
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Sci - Photo
Met & Equip
Sept. 67

340,376

Cathode Polarization in the Deposition of
Magnesium From Fused Carnallite, by B. Markov,
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RUSSIAN, no per, Zhur Fiz Khim, Vol XIII,
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OTS TT-64-14148
Sci Tr Center
RT-2183

Scientific - Chemistry
CTS 70/Jul 55

25, 226

Volkenstein, M. V. and Shorygin, P. P.
ANALYSIS OF GASOLINE BY THE RAMAN EFFECT.
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Order from: OTS or SLA \$1.60

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1939, pp 1559-1562.

OTS TT-64-14146

Sci Tr Center RT-2184

SLA R-2936

Scientific - Chemistry

Apr 55 OTS

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Order from DTS or SLA \$1.10

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compounds.

(Unannounced)

61-18056

I. Berestneva, Z. Ya.
II. Kargin, V. A.

184041

Office of Technical Services

The Relationship Between the Surface Energy of
Liquids and the Accommodation Coefficients, by
M. Baranov, 15 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XIII, No 11, 1939,
pp 1634-1641. 9687265

NLL 5828.4F

DDC RSIC-52

Sci - Nuclear Sci & Technology
Oct 63

OTS TT-68-24114

NLL Ref: 2313.4 1962 (47-3) (P-11)

Pastovskij, V. G. and Gurvich, I. G.
HET ONDERZOEK VAN HET EVENWICHT VLOEI-
STOF - DAMP VAN HET BINAIRE SYSTEEM
ZUURSTOF - KRYPTON (The Equilibrium Liquid -
vapour in the Binary System Oxygen - Krypton) tr. by
A. Bosch-Silke and G. J. M. Fritschy. 17p. 16 refs.
MTWL: 130 (text in Dutch).
Order from O'S or EIC \$1.85

61-17735

Trans. of Zhurnal Fizicheskoi Khimii (USSR) 1939,
v. 13, p. 1680-1689.

DESCRIPTORS: *Krypton, *Oxygen, Phase studies,
Liquids, Vapours.

61-17735

- I. Pastovskij, V. G.
- II. Gurvich, I. G.
- III. MTWL-130
- IV. Stichting Moeilijk
Toegankelijke Wetenschap-
pelijke Literatuur

Office of Technical Services

Ammonia Content of Hydrogen and Nitrogen Under
Pressure in Equilibrium With Liquid Ammonia, by
I. R. Krichval'skiy, N. E. Khazanova. UNCLASSIFIED

RUSSIAN, per. Zhur Fiz Khim, Vol XIII, 1939,
pp 1690-1693.

Sci Mus Lib 58/0333

Sci - Chem
Sep 58

73,372

(NY-4830)

Propagation of Cold Flame in Fuel Mixtures
Containing 0.03% Carbon Disulfide, by V. G. Voronkov,
N. N. Semenov, 74 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XIII, No 12,
1939, pp 1695-1727.

JPRS 7502

Sci - Chem

Feb 61

139,373

The Determination of Vapor Pressure of $\text{AlCl}_3\text{-HCl}$
Melts at High Temperatures, by I. I. Naryshkin, 3 pp.

RUSSIAN, no par, Zhur Fiz Khim, Vol XIII, 1939,
pp 690-692.

S.I.A. Tr 1287

Sol - Phycos
Jan 57 CHS

42,585

Thermal Analysis of Systems $\text{AlCl}_3\text{-NaCl}$ and
 $\text{AlCl}_3\text{-KCl}$, by U. I. Shvartsman, 5 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XIV, 1940,
pp 253-256.

AEC Tr-4347

Sci - Phys
May 61

150,341

Kinetics of Sorption on Granular Substances, by Ya.
Zabozhinskiy, 23 pp UNCLASSIFIED

RUSSIAN, Izv. Akad. Nauk SSSR, Ser. Khim., Vol. 32, No. 3, 1940

Sci Tr Center
RT 1006

Scientifics - Chemistry

15,350

Formation of Nitrogen Oxides in Ultra-High
Frequency Torch Discharge, by P. A. Serebryakov.

RUSSIAN, per, Zhur Fiz Khim, Vol XIV, No 2,
1940, pp 175-179.

GCT-1502B

CCT-1502 TM

Sci - Chem
Dec 59

102,996

Solomin, N. V.
VISCOSITY OF SILICA. [1962] 9p. (tables refs. omitted) 27 refs.
Order from OTS or SLA \$1.10

62-18318

Trans. of [Zhurnal Fizicheskoi Khimii] (USSR) 1940,
v. 14 [no. 2] p. 235-243.

DESCRIPTORS: *Glass, Quartz, *Silicon compounds,
Viscosity, Test equipment, *Viscosimeters, Dioxides.

(Materials--Ceramics, TT, v. 9, no. 5)

62-18318

1. Solomin, N. V.

Office of Technical Services

To the Question of the Electrolysis of Fused Carnallite.
Dependence of the Current Output by Magnesium Chloride
Content in the Melt, by B. Markov, I. Scherbakov,
V. Kalitova, 8 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XIV, No 2, pp 220-
224, 1940.

Morris D. Friedman M-113

Sci - Chem
Aug 58

70,610

(NY-4844)

Distribution of the CS Radical in the Low-Temperature
Flame Zone of Carbon Disulfide, by V. Kondrat'ev,
7 pp.

RUSSIAN, per, Dokl. Akad. Nauk SSSR, Vol XIV, No 3, 1940,
pp 287-290.

JPRS 7533

Sci - Chem

Feb 61

140,678

The Influence of Water Vapor on the Rate of
Reduction of Magnetite and Hematite by Carbon
Monoxide, by Ye. P. Tatiyevskaya, 10 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XIV, 1940,
pp 349-356.

SLA 59-15408

Sci
Dec 59
Vol 2, No 5

103,792

The Thermodynamic Functions of M. Freedom,
by I. Golner, A. Pauline, et al.
RUBEN, per. Ther Fiz Khim, Vol XIV, No 3, 1940,
pp 374-379.

AEC-Dounreay Tr No 136
Available on loan only

Sci
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Solubility of Carbon Dioxide From its Mixtures
With Hydrogen and Nitrogen in Water Under Pressure,
by S. D. Zayalishvili, 9 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XIV, 1940, pp
413-417.

SLA/R-2446

1
Scq
Apr 59

84,911

Zhur Fiz Khim Vol 14, page 418-21 (1940)

Solubility of Ethylene and Propylene in Liquid N₂
and Liquid O₂

by N. M. Tsin.

OTS 61-11136

AEC Trans (avail. Brookhaven)

Zh Fiz Khim Vol 14, page 422-6 (1940)

Solubility of Acetylene and CO_2 in Liquid N_2 and

Liquid O_2 by M. F. Fedorova

AEC Trans (avail. Brookhaven)

Handwritten:
14-103
1940

Solubility of Gases in Liquids at Low Temperatures
and High Pressures. III. Solubility of Hydrogen in
Liquid Methane, by V. G. Pastovskiy, M. G.
Gonikberg, 5 pp.

RUSSIAN, mp per, Zhur Fiz Khim, Vol XIV, No 3,
1940, pp 427, 428.

Sci Tr Center
RT - 2668

Scientific - Chemistry
Dec 55 CTS/LEX

28,959

Vibration Spectra of Hydrocarbon Molecules, I.
Methods for the Study of Valence Vibrations, by
M. A. El'yashevich, 20 pp.

RUSSIAN, Engl., Zhur Fiz Khim, Vol XIV, No 4, 1940,
pp 461-473.

Sci Trans Center RT-405

Scientific - Physics
CTS/DEX

10,894

Vibration Spectra of Hydrocarbon Molecules. II.
Frequencies of Valence Vibrations of the Carbon
Chain of Molecules of the Paraffin Series, by
B. I. Stepanov, 19 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XIV, No 4, 1940,
pp 474-487.

10,937

Sci Trans Center RT-404

Scientific - Physics
CTS/DEX

Vibration Spectra of Hydrocarbon Molecules, III. An
Approximate Method of Distinguishing Vibrations of
Groups CH, CH₂, and CH₃, by M. A. El'yashevich, 8 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XIV, No 4, 1940,
pp 488-493.

Sci Trans Center RT-409

Scientific - Physics
CTS/DEK

10,895

(NY-4846)
Some Explosive Properties of Nitrogen
Trichloride, by A. Ya. Apin, 22 pp.

RUSSIAN, per Zhur Fiz Khim, Vol XIV, No 4,
1940, pp 494-504.

JPRS 7159

OTS TT-65-12118

Sci - Chem

Nov 60

133,611

Thermodynamic Constants of ~~the~~ Silicon Tetrafluoride.
The Hydrolysis & Equilibrium of Silicon Tetra-
fluoride, by I. G. Ryss, 15 p.

RUSSIAN, per, Zhur Fiz Khim, Vol XIV, 1940, pp
571-581.

SLA R-2939

Sci

Jul 59

92,430

Regular Solutions of Gases in Liquids. I, Regular
Solutions of Hydrogen, by M. G. Gonikberg, 13 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XIV, 1940, pp 582-
588.

SIA 59-10285

Sci - Chem
Sep 59
Vol 2, No 1

97,283

Oxidation of Adsorbed Molecules of Carbon
Monoxide by Atoms of Oxygen, by M. M.
Pavlyuchenko.

RUSSIAN, no per, Zhur Fiz Khim, Vol XIV,
No 5/6, 1940, pp 605-614.

Nat Res Lib TT.561
Ottawa, Canada

Sci - Chemistry

32,057

Theory of Formation of Catalytically Active Ensembles
on Surfaces, by L. L. Klyachko-Gurvich, N. I.
Kobozov, 17 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XIV, 1940, pp
650-668.

SLA/R-2448

Sci
Apr 59

84, 873

Conditions Under Which the Bodenstein Method is
Applicable in Chemical Kinetics, 8 pp. by D. A. Frank-
Kamenetsky

DDR - E 12 - K 11 M
RUSSIAN, per, ~~Phys. Chem.~~ (USSR), 14, 695-700
(1940)

Avail Armed Services Tech Info
Agency au ATI 83146

1537

Scientific - Physics

Measurement of Small Vapor Pressures. I. Vapor
Pressure of Naphthalene, Camphor and Glycerol, by
A. A. Zil'berman-Granovskaya,

RUSSIAN, per, Zhur Fiz Khim, Vol XIV, No 5-6, 1940,
pp 759-767.

ATS RJ-2136

Sci - Chem

May 60

115,450

Measurement of Small Vapor Pressures. II. Vapor
Pressure of CIS and Trans Isomers, by A. A. Zil'berman-
Granovskaya,

RUSSIAN, *ibid.*, *Zhur Fiz Khim*, Vol XIV, No 5-6, 1940,
pp 763-773.

ATS RI-2187

Sci - Chem

May 60

115,451

(NY 4844)

The Preparation of CS During the Photodissociation of
CS₂ and COS, by V. Kondrat'ev, A. Yakovleva, 11 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XIV, No 7, 1940,
pp 853-858.

JPRS 7530

Sci - Chem

Feb 61

138,354

(NY 4844)

The Preparation of Sulfur Monoxide Photochemically,
by V. Kondratyev, A. Yakoleva, 7 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XIV, No 7,
1940, pp 859-862.

JPRS 7531

Sci. - Chem

Feb 61

140,761

Oxidation of Hydrogen by Atomic Oxygen, 19 pp.
by M. M. Pavlinchenko
RUSSIAN, per, I. Phys. Chem., (UESI), 14, B77-85,
(1940).

Avail Armed Services Tech
Info Agency as ATI 83148

1327

Scientific - Chemistry, Physics

The Effect of Catalytic Admixtures Upon the Fission
of Organic Peroxides, by P. I. Bereznovskaya, E. K.
Bifolomeyeva.

RUSSIAN, per. Zhur Fiz Khim, Vol XIV, ~~1940~~, 1940,
p. 933-940.

NRL Tr 151

SLA Tr

CIA 513240

NAD 15137

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Scientific - Chemistry

15,841

A Study of the Adsorption of Organic Vapors on an
Organic Adsorbent From the Quenching of
Fluorescence, by S. P. Tibilov, 18 pp.

RUSSIAN, par, Zhur Fiz Khim, Vol XIV, 1940,
pp 953-963. 9093973

ABC Tr-5228

Sci - Phys, Chem
Sep 62

212, 691

The Mechanism of the Functioning of the Nickel Oxide
Electrode, by B. V. Ershler, G. S. Tyurikov, and
A. D. Smirnova, 9 pp.

RUSSIAN, per, Zhur. Fiz. Khim., Vol 14, 1940,
pp 985-988.

SLA Tr R-1015
4

Sci

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Measurement of Small Vapor Pressures. III.
Measurement of the Vapor Pressures of Halogen-
Substituted Benzenes, by A. A. Zil'berman-
Granovskaya, E. A. Shugart,

RUSSIAN, Izv. Akad. Nauk SSSR, Vol XIV, No 7,
1940, pp 1004-1006.

MTS RJ-2188

Sci - Chem

May 60

115,452

Combustion of Nitroglycerol, by A. I. Dolgopov, 32 pp
UNCLASSIFIED

RUSSTAN, PER, Zhur Fiz Khim, Vol XIV, No 8, 1940,
pp 1009-1025.

Sci Tr Center
RZ 1023

Scientific - ~~Physical~~ Chemistry

15,370

(NY-4840)

Theory of Thermal Explosions III. Thermal
Explosions in Autocatalytic Reactions, by O. M.
Todes, P. V. Melent'yev, 28 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XIV, No 8, 1940,
pp 1026-1052.

JPRS 7160

Sci - Phys

Nov 60

133, 346

Photoelectrochemical Processes on Iron in
the Presence of Hydrogen Peroxide, by V. I.
Veselovskiy.

RUSSIAE, per, Zhur Fiz Khim, Vol XXIII, No 9,
1949, pp 1095-1105.

ATS RJ-1151

Sci - Phys, Chem

Apr 60

114,513

Surface Tension in Binary and Ternary Mixtures of
Oxides, by P. F. Kozakevich, A. F. Kononenko, 16 pp.

RUSSIAN, per, Zhur Fiz Khim, Vol XIV, 1940, pp 118-
1127.

SLA R-2801

Sci

Jul 59

92,408

Temkin, M. I.
KINETICS OF HETEROGENEOUS CATALYTIC PROC-
ESSES. [196] 17p.
Order from OTS or SLA \$1.10

61-18110

Trans. of Zhurnal Fizicheskoi Khimii (USSR) 1940,
v. 14, no. 9/10, p. 1153-1158.

DESCRIPTORS: *Catalysis, Analysis, *Reaction
kinetics, Chemical reactions, *Adsorption.

The Langmuir theory of kinetics of chemical reactions
is insufficient for explanation of all facts encountered
in catalysis. A discussion of research at the Karpov
Institute cites an expression for the adsorption iso-
therm and its experimental support for specified cases.
(Author)

(Chemistry--Physical, TT, v. 6, no. 8)

61-18110

J. Title: Langmuir theory
I. Temkin, M. I.

5135

Office of Technical Services

Para-Ortho Conversion of Hydrogen and the Exchange
Reaction Between Light and Heavy Hydrogen on Charcoal,
by R. Burstein.

RUSSIAN, ^{in R} per, Zhur Fiz Khim, No 14, 1940, pp 1195-1199.

*ATIC

Sci - Chemistry

Apr 57 CTS

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SLA R-2961

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ABSI Tr 3217

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AEC Tr 1155

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v. 15, p. 101-108.

DESCRIPTORS: *Electron diffraction analysis.
*X-ray diffraction analysis, *Iron alloys, Corrosion.

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SLA R-2951

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SLA R-2948

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Kudrin, G. B. Kleibis.

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Order from OTS or SLA \$1.60

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Trans. of Zhurnal Fizicheskoi Khimii (USSR) 1961,
v. 35, p. 333-345.

DESCRIPTORS: *Polyenes, Polymerization, Chemical
reactions, Nickel catalysts.

The kinetics of dimerization of ethylene on a nickel
catalyst was determined, and it was established that
the velocity of dimerization is proportional to the
pressure of ethylene in the gaseous phase in the first
degree. The apparent energy of activation of the reac-
tion is about 10,500 cal. The results obtained were
interpreted with the aid of the regularities character-
istic for the kinetics of reactions occurring on non-
uniform surfaces. (author)

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Order from OTS or SLA \$1.10

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Trans. of Zhurnal Fizicheskoi Khimii (USSR) 1941,
v. 15, p. 470-474

DESCRIPTORS: Gases, Ignition, Nitrogen, Oxygen,
Methanes.

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